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chain nodes :

16 17 18 19 20 21 22 23 24 25 26

ring nodes :

 $1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9 \quad 10 \quad 11 \quad 12 \quad 13 \quad 14 \quad 15$

chain bonds :

1-26 3-25 4-24 8-10 13-16 16-17 17-18 18-19 18-23 19-20 20-21 21-22 ring bonds :

exact/norm bonds :

 $1-2 \quad 1-6 \quad 1-26 \quad 2-3 \quad 3-4 \quad 3-25 \quad 4-5 \quad 4-24 \quad 5-6 \quad 5-7 \quad 6-9 \quad 7-8 \quad 8-9 \quad 13-16 \quad 16-17$

18-19 18-23 19-20 21-22

exact bonds:
8-10 17-18 20-21
normalized bonds:

10-11 10-15 11-12 12-13 13-14 14-15

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS

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=> s 11 sam

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SAMPLE SCREEN SEARCH COMPLETED - 17 TO ITERATE

100.0% PROCESSED 17 ITERATIONS 13 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
PROJECTED ITERATIONS: 93 TO 587
PROJECTED ANSWERS: 44 TO 476

L2 13 SEA SSS SAM L1

=> s 11 full

FULL SEARCH INITIATED 17:07:48 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 335 TO ITERATE

100.0% PROCESSED 335 ITERATIONS 284 ANSWERS

SEARCH TIME: 00.00.01

L3 284 SEA SSS FUL L1

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L4 254 L3 AND CAPLUS/LC

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FILE LAST UPDATED: 25 Jan 2011 (20110125/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2010

CAplus now includes complete International Patent Classification (IPC) reclassification data for the fourth quarter of 2010.

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L6 8 L5 AND FLUORES?

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L6 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:319211 CAPLUS

DOCUMENT NUMBER: 152:542077

TITLE: Influence of fluorophore and linker composition on the

pharmacology of fluorescent adenosine A1

receptor ligands

AUTHOR(S): Baker, Jillian G.; Middleton, Richard; Adams, Luke;

May, Lauren T.; Briddon, Stephen J.; Kellam, Barrie;

Hill, Stephen J.

CORPORATE SOURCE: Institute of Cell Signalling, School of Biomedical

Sciences, Medical School, Queen's Medical Centre,

University of Nottingham, Nottingham, UK

SOURCE: British Journal of Pharmacology (2010), 159(4),

772-786

CODEN: BJPCBM; ISSN: 1476-5381

URL: http://www3.interscience.wiley.com/journal/123262

580/abstract Wiley-Blackwell

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

OTHER SOURCE(S): CASREACT 152:542077

AB Background and purpose: The introduction of fluorescence-based

techniques, and in particular the development of fluorescent ligands, has allowed the study of G protein-coupled receptor pharmacol. at the single cell and single mol. level. This study evaluated how the physicochem. nature of the linker and the fluorophore affected the pharmacol. properties of fluorescent agonists and antagonists. Exptl. approach: Chinese hamster ovary cells stably expressing the human adenosine A1 receptor and a cyclic 3',5' adenosine monophosphate response element-secreted placental alkaline phosphatase (CRE-SPAP) reporter gene, together with whole cell [3H]-8-cyclopentyl-1,3-dipropylxanthine (DPCPX) radioligand binding, were used to evaluate the pharmacol. properties of a range of fluorescent ligands based on the antagonist xanthine amine congener (XAC) and the agonist 5' (N-ethylcarboxamido) adenosine (NECA). Key results: Derivs. of NECA and XAC with different fluorophores, but equivalent linker length, showed significant differences in their binding properties to the adenosine Al receptor. The BODIPY 630/650 derivs. had the highest affinity. Linker length also affected the pharmacol. properties, depending on the fluorophore used. Particularly in fluorescent agonists, higher agonist potency could be achieved with large or small linkers for dansyl and BODIPY 630/650 derivs., resp. Conclusions and implications: The pharmacol. of a fluorescent ligand was critically influenced by both the fluorophore and the associated linker. Furthermore, the authors' data strongly suggest that the physicochem. properties of the fluorophore/linker pairing determine where in the environment of the target receptor the fluorophore is placed, and this, together with the environmental sensitivity of the resulting fluorescence, may finally decide its utility as a fluorescent probe.

IT 96865-92-8, XAC

RL: BSU (Biological study, unclassified); BIOL (Biological study) (influence of fluorophore and linker composition on pharmacol. of fluorescent adenosine Al receptor ligands)

RN 96865-92-8 CAPLUS

CN Acetamide, N-(2-aminoethyl)-2-[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

IT 96865-92-8DP, XAC, derivs. 690267-56-2P 1224605-11-1P 1224605-12-2P 1224605-13-3P

1224605-14-4P 1224605-15-5P 1224605-16-6P

1224699-44-8P

RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (influence of fluorophore and linker composition on pharmacol. of fluorescent adenosine Al receptor ligands)

RN 96865-92-8 CAPLUS

CN Acetamide, N-(2-aminoethyl)-2-[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)

RN 690267-56-2 CAPLUS

CN Boron, difluoro[N-[2-[[[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]-6-[[[4-[(1E)-2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene- κ N]methyl]-1H-pyrrol-2-yl- κ N]ethenyl]phenoxy]acetyl]amino]hexanamidato]-, (T-4)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

O Pr-n

(CH₂)₅-C-NH-CH₂-CH₂-NH-C-CH₂-0

RN 1224605-11-1 CAPLUS

CN 1H,5H,11H,15H-Xantheno[2,3,4-ij:5,6,7-i'j']diquinolizin-18-ium, 2,3,6,7,12,13,16,17-octahydro-9-[4-[[[6-oxo-6-[[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]hexyl]amino]sulfonyl]-2-sulfophenyl]-, inner salt (CA INDEX NAME)

PAGE 2-A

RN

1224605-12-2 CAPLUS 3H-Indolium, 2-[5-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-CN ylidene)-1,3-pentadien-1-yl]-3,3-dimethyl-1-[6-oxo-6-[[2-[[2-[4-(2,3,6,9tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8yl)phenoxy]acetyl]amino]ethyl]amino]hexyl]-5-sulfo-, inner salt (CA INDEX NAME)

_ so3-

RN 1224605-13-3 CAPLUS

CN Phenoxazin-5-ium, 3-[methyl[3-oxo-3-[[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]propyl]amino]-7-[methyl(3-sulfopropyl)amino]-, inner salt (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 1224605-14-4 CAPLUS

 $\label{eq:cn_loss} \textbf{CN} \qquad \textbf{Acetamide, N-[2-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]ethyl]-1-naphthalenyl]} \\ \textbf{Sulfonyl} \\ \textbf{S$

2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]-(CA INDEX NAME)

RN 1224605-15-5 CAPLUS

CN Octanamide, 8-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]-N-[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]- (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 1224605-16-6 CAPLUS

CN Hexanamide, 6-[[6-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]-1-oxohexyl]amino]-N-[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]- (CA INDEX NAME)

RN 1224699-44-8 CAPLUS

CN Boron, $[N1-[2-[[3-[5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-\kappa N)methyl]-1H-pyrrol-2-yl-\kappa N]-1-oxopropyl]amino]ethyl]-N8-[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]octanediamidato]difluoro-, (T-4)- (CA INDEX NAME)$

PAGE 1-A

IT 97242-21-2

RL: RCT (Reactant); RACT (Reactant or reagent) (influence of fluorophore and linker composition on pharmacol. of

fluorescent adenosine A1 receptor ligands)

RN 97242-21-2 CAPLUS

CN Hexanamide, 6-amino-N-[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:1472288 CAPLUS

DOCUMENT NUMBER: 148:85762

TITLE: Pharmaceutical combination comprising adenosine A1

receptor antagonists and radiocontrast media for

treatment of radiocontrast media induced nephropathy

INVENTOR(S): Hocker, Berthold; Fischer, Yvan; Witte, Klaus;

Ziegler, Dieter

PATENT ASSIGNEE(S): Solvay Pharmaceuticals GmbH, Germany

SOURCE: Eur. Pat. Appl., 19pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIN	D	DATE	2	APPLICATION NO.						DATE							
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E	P 1	1870	093			A1		2007	1226]	EP 2	006-	1156	77		2	0060	519			
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PRIORITY APPLN. INFO.: EP 2006-115677 20060619

AB The present invention relates to pharmaceutical combinations comprising a therapeutically effective amount of at least one selective adenosine A1 antagonist combined with at least one radiocontrast media. The invention

also relates to the use of said combinations in the manufacture of a medicament for the treatment of radiocontrast media induced nephropathy.

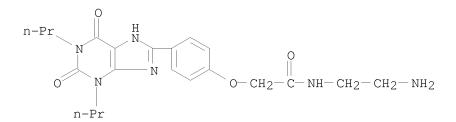
Furthermore, the invention is relating to a kit comprising a single dosage form of said combination of at least one adenosine Al antagonist and at least one radiocontrast media.

IT 96865-92-8, XAC

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical combination comprising adenosine A1 receptor antagonists and radiocontrast media for treatment of radiocontrast media induced nephropathy)

RN 96865-92-8 CAPLUS

CN Acetamide, N-(2-aminoethyl)-2-[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:301189 CAPLUS

DOCUMENT NUMBER: 144:343538

TITLE: Fluorescence-based high content screening of

compounds for functional response or pharmacological

properties

INVENTOR(S): Hill, Steven John; Kellam, Barrie; Briddon, Stephen

John

PATENT ASSIGNEE(S): The University of Nottingham, UK

SOURCE: PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KINI	O	DATE			APPLICATION NO.						DATE			
WO	O 2006032926 O 2006032926 O 2006032926				A2 A9 A3				1	WO 2	005-	20050926							
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BA, HR, MK, YU

US 20090093001 A1 20090409 US 2008-576035 20081215 PRIORITY APPLN. INFO.: GB 2004-21285 A 20040924 WO 2005-GB3709 W 20050926

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 144:343538

AB A high content screening assay for rapidly screening one or more compds. to determine functional response or pharmacol. properties thereof, comprises (i) priming a cell or cell material with a sensor for a biol. response; (ii) contacting the compound(s) to be tested with the primed cell or cell material or contacting a cell or cell material which has been contacted with the compound(s) with the primed cell or cell material; (iii) simultaneously or subsequently contacting with a fluorescent agonist or a fluorescent neutral antagonist wherein the binding of the fluorescent agonist or antagonist and its associated biol. response are detected or monitored in the same cell and are distinct allowing sep. readout.

IT 690267-56-2, XAC-BY 630

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(fluorescence-based high content screening of compds. for functional response or pharmacol. properties)

RN 690267-56-2 CAPLUS

CN Boron, difluoro[N-[2-[[[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]-6-[[[4-[(1E)-2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-kN]methyl]-1H-pyrrol-2-yl-kN]ethenyl]phenoxy]acetyl]amino]hexanamidato]-, (T-4)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2004:847667 CAPLUS

DOCUMENT NUMBER: 141:350363

TITLE: Preparation of fluorescently tagged

nucleoside ligands as adenosine A1 receptors

INVENTOR(S): George, Michael; Hill, Stephen John; Kellam, Barrie;

Middleton, Richard John

PATENT ASSIGNEE(S): University of Nottingham, UK

SOURCE: PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT	NO.			KIND DATE					APPL	ICAT		DATE						
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 141:350363

GI

GΙ

AB Library comprising a plurality of tagged non-peptide nucleoside ligands (LigJL)mL(JTTag)m(JTL(JLLig)m)p including and salts were prepared, thereof comprising one or a plurality of same or different ligand moieties Lig each linked to a one or a plurality of same or different tag moieties Tag via same or different linker moieties L and same or different linking site or linking functionality JT and JL wherein Lig comprises a GPCR ligand, an

Ι

inhibitor of an intracellular enzyme or a substrate or inhibitor of a drug transporter, L is a single bond or heteroatom N, O, S, P, branched or straight chain saturated or unsatd., C1-600 hydrocarbyl; Tag is tagging substrate; m is 1 to 3; p is 0 to 3. G-protein coupled receptor (GPCR) ligand is selected from any compound which is effective as an agonist or antagonist for an adenosine receptor, β adrenoceptor, muscarinic receptor, histamine receptor, an opiate receptor, cannabinoid receptor, chemokine receptor, α adrenoceptor, GABA receptor, prostanoid receptor, 5-HT (serotonin) receptor, an excitatory amino acid receptor (e.g. glutamate), dopamine receptor, protease-activating receptor, neurokinin receptor, angiotensin receptor, oxytocin receptor, leukotriene receptor, nucleotide receptor (purines and pyrimidines), calcium-sensing receptor, TSH receptor, neurotensin receptor, vasopressin receptor, olfactory receptor, nucleobase receptor (e.g. adenosine), lysophosphatidic acid receptor, sphingolipid receptor, tyramine receptor (trace amines), free-fatty acid receptor and cyclic nucleotide receptor; an inhibitor of intracellular enzymes is an inhibitor of cyclic nucleotide phosphodiesterases; and substrate or inhibitor of drug transporter is selected from substrate or inhibitor of an equilibrium based drug transporters or ATP driven pumps such as catecholamine transporter, nucleoside transporter, an AT P-binding cassette transporter, cyclic nucleotide transporter or derivs. or analogs thereof. Thus, I was prepared as adenosine Al receptor.

IT 690267-56-2P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of fluorescently tagged nucleoside ligands as adenosine receptors)

RN 690267-56-2 CAPLUS

CN Boron, difluoro[N-[2-[[[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]-6-[[[4-[(1E)-2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene- κ N]methyl]-1H-pyrrol-2-yl- κ N]ethenyl]phenoxy]acetyl]amino]hexanamidato]-, (T-4)- (9CI) (CA INDEX NAME)

PAGE 1-A

IT 96865-92-8

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of fluorescently tagged nucleoside ligands as
 adenosine receptors)

RN 96865-92-8 CAPLUS

CN Acetamide, N-(2-aminoethyl)-2-[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2004:316132 CAPLUS

DOCUMENT NUMBER: 140:418075

TITLE: Quantitative analysis of the formation and diffusion

of Al-adenosine receptor-antagonist complexes in

single living cells

AUTHOR(S): Briddon, S. J.; Middleton, R. J.; Cordeaux, Y.;

Flavin, F. M.; Weinstein, J. A.; George, M. W.;

Kellam, B.; Hill, S. J.

CORPORATE SOURCE: Institute of Cell Signalling, Medical School,

University of Nottingham, Nottingham, NG7 2UH, UK

SOURCE: Proceedings of the National Academy of Sciences of the

United States of America (2004), 101(13), 4673-4678

CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER: National Academy of Sciences

DOCUMENT TYPE: Journal LANGUAGE: English

AB The Al-adenosine receptor (Al-AR) is a G protein-coupled receptor that mediates many of the physiol. effects of adenosine in the brain, heart, kidney, and adipocytes. Currently, ligand interactions with the Al-AR can be quantified on large cell populations only by using radioligand binding. To increase the resolution of these measurements, the authors have designed and characterized a previously undescribed fluorescent antagonist for the Al-AR, XAC-BY630, based on xanthine amine congener (XAC). This compound has been used to quantify ligand-receptor binding at a

single cell level using fluorescence correlation spectroscopy (FCS). XAC-BY630 was a competitive antagonist of A1-AR-mediated inhibition of cAMP accumulation [log10 of the affinity constant (pKb = 6.7)] and stimulation of inositol phosphate accumulation (pKb = 6.5). Specific binding of XAC-BY630 to cell surface A1-AR could also be visualized in living Chinese hamster ovary (CHO)-A1 cells by using confocal microscopy. FCS anal. of XAC-BY630 binding to the membrane of CHO-A1 cells revealed three components with diffusion times (τD) of 62 μs $(\tau D1$, free ligand), 17 ms (τ D2, A1-AR-ligand), and 320 ms (τ D3). Confirmation that τ D2 resulted from diffusion of ligand-receptor complexes came from the similar diffusion time observed for the fluorescent A1-AR-Topaz fusion protein (15 ms). Quantification of au D2 showed that the number of receptor-ligand complexes increased with increasing free ligand concentration and was decreased by the selective A1-AR antagonist, 8-cyclopentyl-1,3-dipropylxanthine. The combination of FCS with XAC-BY630 will be a powerful tool for the characterization of ligand-A1-AR interactions in single living cells in health and disease. 690267-56-2, XAC-BY 630 RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses) (design and pharmacol. characterization of fluorescent

xanthine amine congener derivative for quant. anal. of formation and diffusion of Al-adenosine receptor-antagonist complexes in single living cells)

RN 690267-56-2 CAPLUS

ΙT

Boron, difluoro [N-[2-[[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-CN purin-8-y1) phenoxy] acety1] amino] ethy1]-6-[[[4-[(1E)-2-[5-[[5-(2-thieny1)-2-[5-[[5-(2-thieny1)-2-[5-[[5-(2-thieny1)-2-[5-[5-(2-thieny1)-2-[5-[5-(2-thieny1)-2-[5-[5-(2-thieny1)-2-[5-[5-(2-thieny1)-2-[5-(2-2H-pyrrol-2-ylidene- κ N]methyl]-1H-pyrrol-2-yl- κ N]ethenyl]phenoxy]acetyl]amino]hexanamidato]-, (T-4)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

$$-\text{(CH}_2)_5-\text{C-NH-CH}_2-\text{CH}_2-\text{NH-C-CH}_2-\text{O}$$

96865-92-8, Xanthine amine congener ΤТ 690267-56-2D, complexes with A1-adenosine receptor RL: BSU (Biological study, unclassified); BIOL (Biological study) (design and pharmacol. characterization of fluorescent xanthine amine congener derivative for quant. anal. of formation and diffusion of Al-adenosine receptor-antagonist complexes in single living cells)

RN 96865-92-8 CAPLUS

CN Acetamide, N-(2-aminoethyl)-2-[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

RN 690267-56-2 CAPLUS

CN Boron, difluoro[N-[2-[[[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]-6-[[[4-[(1E)-2-[5-[[5-(2-thienyl)-2H-pyrrol-2-ylidene-kN]methyl]-1H-pyrrol-2-yl-kN]ethenyl]phenoxy]acetyl]amino]hexanamidato]-, (T-4)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

O Pr-n

(CH₂)₅-C-NH-CH₂-CH₂-NH-C-CH₂-0

n-Pr

OS.CITING REF COUNT: 42 THERE ARE 42 CAPLUS RECORDS THAT CITE THIS

RECORD (42 CITINGS)

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1999:405112 CAPLUS

DOCUMENT NUMBER: 131:56155

TITLE: Methods for the simultaneous identification of novel

biological targets and lead structures for drug

development using combinatorial libraries and probes

INVENTOR(S): Heefner, Donald L.; Zepp, Charles M.; Gao, Yun; Jones,

Steven W.

PATENT ASSIGNEE(S): Sepracor Inc., USA SOURCE: PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PATENT NO.					KIND DATE				APPLICATION NO.							DATE			
	WO 9931267			A1 19990624			WO 1998-US26894						19981218							
		W:	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,		
			DK,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,		
			ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,		
			MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,		
			TR,	TT,	UA,	UG,	UZ,	VN,	YU,	ZW										
		RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,		
			FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ΒJ,	CF,	CG,	CI,		
			CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG								
	CA	2314	422			A1		1999	0624	1	CA 1	998-	2314	422		1	9981:	218		
	AU	9919	256			Α		1999	0705	AU 1999-19256						19981218				
	EΡ	1049	796			A1		2000	1108	EP 1998-964053						19981218				
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,		
			ΙE,	SI,	LT,	LV,	FΙ,	RO												
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PRIO	PRIORITY APPLN. INFO.:									US 1997-68035P						P 19971218				
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The combinatorial screening assays and detection methods of the present AB invention encompass highly diversified libraries of compds. which act as fingerprints to allow for the identification of specific mol. differences existing between biol. samples. The combinatorial screening assay and detection methods of the present invention utilize highly diversified libraries of compds. to interrogate and characterize complex mixts. in order to identify specific mol. differences existing between biol. samples, which may serve as targets for diagnosis of development of therapeutics. The invention is base, in part, on the design of sensitive, rapid, homogeneous assay systems that permit the evaluation, interrogation, and characterization of samples using complex, highly diversified libraries of mol. probes. The ability to run the high throughput assays in a homogeneous format increases sensitivity of screening. In addition, the homogeneous format allows the mols. which interact to maintain their native or active conformations. Moreover, the homogeneous assay systems of the invention utilize robust detection systems that do not require separation steps for detection of reaction products. The assays of the invention can be used for diagnostics, drug screening and discovery, target-driven discover, and in the field of proteomics and genomics for the identification of disease markers and drug targets.

IT 96865-92-8

RL: RCT (Reactant); RACT (Reactant or reagent) (identification of novel biol. targets and lead structures for drug development using combinatorial libraries and probes)

RN 96865-92-8 CAPLUS

CN Acetamide, N-(2-aminoethyl)-2-[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)

IT 111023-89-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (ligand; identification of novel biol. targets and lead structures for drug development using combinatorial libraries and probes)

RN 111023-89-3 CAPLUS

CN Acetamide, N-[2-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]thioxomethyl]amino]ethyl]-2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)

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PAGE 1-B

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD

(8 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1991:505429 CAPLUS

DOCUMENT NUMBER: 115:105429

ORIGINAL REFERENCE NO.: 115:17869a,17872a

TITLE: Trifunctional agents as a design strategy for

tailoring ligand properties: irreversible inhibitors

of Al adenosine receptors

AUTHOR(S): Boring, Daniel L.; Ji, Xiao Duo; Zimmet, Jeff; Taylor,

Kirk E.; Stiles, Gary L.; Jacobson, Kenneth A.

CORPORATE SOURCE: Lab. Bioorg. Chem., Natl. Inst. Diabetes, Dig. Kidney

Dis., Bethesda, MD, 20892, USA

SOURCE: Bioconjugate Chemistry (1991), 2(2), 77-88

CODEN: BCCHES; ISSN: 1043-1802

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

GI

AB The 1,3-phenylene diisothiocyanate conjugate of XAC (I), a potent Al selective adenosine antagonist) was characterized as an irreversible inhibitor of Al adenosine receptors. To further extend this work, a series of analogs (e.g., II) were prepared containing a third substituent in the

phenylisothiocyanate ring, incorporated to modify the physicochem. or spectroscopic properties of the conjugate. Sym. trifunctional crosslinking reagents bearing two isothiocyanate groups were prepared as general intermediates for crosslinking functionalized congeners and receptors. Xanthine isothiocyanate derivs. containing hydrophilic, fluorescent, or reactive substituents, linked via an amide, thiourea, or methylene group in the 5-position, were synthesized and found to be irreversible inhibitors of Al adenosine receptors. The effects of the 5-substituent on water solubility and on the Al/A2 selectivity ratios derived from binding assays in rat brain membranes were examined Inhibition of binding of [3H]-N6-(2-phenylisopropyl)adenosine and [3H]CGS 21680 [2-[2-[4-(2-carboxyethyl)phenyl]ethyl]amino]adenosine-5'-N-

ethylcarboxamide] at central A1 and A2 adenosine receptors, resp., was measured. A conjugate of XAC and 1,3,5-triisothiocyanatobenzene was 894-fold selective for A1 receptors. Reporter groups, such as fluorescent dyes and a spin-label, were included as chain substituents in the irreversibly binding analogs, which were designed for spectroscopic assays, histochem. characterization, and biochem. characterization of the receptor protein.

IT 120059-19-0

RL: BIOL (Biological study)

(Al adenosine receptor inhibitory activity of, isothiocyanate derivs. in relation to)

RN 120059-19-0 CAPLUS

CN Acetamide, N-[2-[[[(3-isothiocyanatophenyl)amino]thioxomethyl]amino]ethyl]-2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]-(CA INDEX NAME)

PAGE 1-A

PAGE 1-B

IT 133887-95-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and A1 adenosine receptor inhibitory activity of)

RN 133887-95-3 CAPLUS

CN Acetamide, N-[2-[[[(3,5-diisothiocyanatophenyl)amino]thioxomethyl]amino]et hyl]-2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)

PAGE 1-A

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and Al adenosine receptor inhibitory activity of)

RN 133887-82-8 CAPLUS

CN Benzoic acid, 3-isothiocyanato-5-[[[[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]-, ethyl ester (CA INDEX NAME)

PAGE 1-B

PAGE 1-A

RN 133887-99-7 CAPLUS

CN Acetamide, N-[2-[[[(3-aminophenyl)amino]thioxomethyl]amino]ethyl]-2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)

RN 133888-00-3 CAPLUS

CN Carbamic acid, [3-[[[2-[[[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]phenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 133888-01-4 CAPLUS

CN Benzoic acid, 3-[[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]- (CA INDEX NAME)

RN 133888-02-5 CAPLUS

CN Benzoic acid, 3-[[[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 133888-03-6 CAPLUS

CN Benzamide, 4-(fluoromethyl)-N-[4-[[[[3-[[[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]bhenyl]amino]bhenyl]- (CA INDEX NAME)

RN 133888-04-7 CAPLUS

CN Benzamide, N-[4-[[4-(fluoromethyl)benzoyl]amino]butyl]-3-[[[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]- (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 133888-05-8 CAPLUS

CN Acetamide, N-[2-[[[(6-isothiocyanato-2-pyridinyl)amino]thioxomethyl]amino]ethyl]-2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)

RN 133888-06-9 CAPLUS

CN Acetamide, N-[2-[[[[3-(hydroxymethyl)-5-isothiocyanatophenyl]amino]thioxomethyl]amino]ethyl]-2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 133888-07-0 CAPLUS

CN Benzamide, N-[2-(dimethylamino)ethyl]-3-isothiocyanato-5-[[[[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

PAGE 1-B

$$\begin{array}{c} \text{O} \\ \text{C-NH-CH}_2\text{-CH}_2\text{-NMe}_2 \\ \\ \text{N-C-S} \end{array}$$

RN 133888-08-1 CAPLUS

CN Benzamide, N-[2-(acetylamino)ethyl]-3-isothiocyanato-5-[[[[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]- (CA INDEX NAME)

PAGE 1-A

RN 133888-09-2 CAPLUS

CN Acetamide, N-[2-[[[[3-[[[[2-(dimethylamino)ethyl]amino]thioxomethyl]amino]-5-isothiocyanatophenyl]amino]thioxomethyl]amino]ethyl]-2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 133888-10-5 CAPLUS

CN Acetamide, N-[2-[[[[3-[[[[2-(acetylamino)ethyl]amino]thioxomethyl]amino]-5-isothiocyanatophenyl]amino]thioxomethyl]amino]ethyl]-2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)

PAGE 1-A

RN 133888-11-6 CAPLUS

CN Glycine, N-[[[3-isothiocyanato-5-[[[[2-[[[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]a mino]phenyl]amino]thioxomethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 133888-12-7 CAPLUS

CN Benzamide, N-[2-[(2-bromoacetyl)amino]ethyl]-3-isothiocyanato-5-[[[[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]- (CA INDEX NAME)

PAGE 1-A

$$\begin{array}{c|c} & \circ & \circ \\ & \parallel & \\ & C-NH-CH_2-CH_2-NH-C-CH_2Br \\ & N-C-S \end{array}$$

RN 133888-13-8 CAPLUS

CN Benzamide, 5-azido-N-[2-[[[[3-isothiocyanato-5-[[[[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]ethyl]-2-nitro- (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 133888-14-9 CAPLUS

CN Benzenepropanamide, 4-hydroxy-N-[2-[[3-isothiocyanato-5-[[[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]benzoyl]amino]ethyl]- (CA INDEX NAME)

PAGE 1-A

RN 133888-15-0 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, hexahydro-N-[2-[[3-isothiocyanato-5-[[[2-[[4-(1,2,3,6-tetrahydro-2,6-dioxo-1,3-dipropyl-7H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]benzoyl]amino]ethyl]-2-oxo-, [3aS-(3a α ,4 β ,6a α)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 133888-16-1 CAPLUS

CN Acetamide, N-[2-[[[[3-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]thioxomethyl]amino]ethyl]amino]thioxomethyl]amino]-5-isothiocyanatophenyl]amino]thioxomethyl]amino]ethyl]-2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]-(CA INDEX NAME)

$$S = C =$$

RN 133888-17-2 CAPLUS

CN Benzamide, 3-isothiocyanato-N-[2-[(7-nitro-2,1,3-benzoxadiazol-4-yl)amino]ethyl]-5-[[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]- (CA INDEX NAME)

PAGE 2-A | NO2

RN 133888-18-3 CAPLUS
CN Benzamide, 2-(fluoromethyl)-N-[4-[[[[3-isothiocyanato-5-[[[[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]bhenyl]amino]bhenyl]amino]bhenyl]amino]bhenyl]- (CA INDEX NAME)

RN 133909-49-6 CAPLUS

CN Benzamide, 3-isothiocyanato-5-[[[[2-[[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]a mino]- (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 133909-50-9 CAPLUS

CN Benzoic acid, 3,5-diisothiocyanato-, anhydride with 3-isothiocyanato-5-[[[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]benzoic acid (CA INDEX NAME)

RN 133909-51-0 CAPLUS

CN 1-Piperidinyloxy, 4-[[[[2-[[[[3-isothiocyanato-5-[[[[2-[[[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]phenyl]amino]thioxomethyl]amino]ethyl]amino]thioxomethyl]amino]-2,2,6,6-tetramethyl-(9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 133983-35-4 CAPLUS

CN Benzamide, 4-azido-2-hydroxy-N-[2-[[[[3-isothiocyanato-5-[[[[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]thioxomethyl]amino]phenyl]amino]thioxo

PAGE 1-A

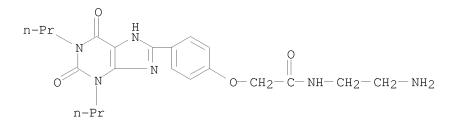
PAGE 1-B

96865-92-8DP, XAC, phenylene diisocyanate conjugates ΙT RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as irreversible inhibitors of Al adenosine receptors)

RN 96865-92-8 CAPLUS

CN Acetamide, N-(2-aminoethy1)-2-[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)



OS.CITING REF COUNT: THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD 6 (6 CITINGS)

ANSWER 8 OF 8 CAPLUS COPYRIGHT 2011 ACS on STN L6

1987:611338 CAPLUS ACCESSION NUMBER:

107:211338 DOCUMENT NUMBER:

ORIGINAL REFERENCE NO.: 107:33739a,33742a

TITLE: Molecular probes for extracellular adenosine receptors AUTHOR(S): Jacobson, Kenneth A.; Ukena, Dieter; Padgett, William;

Kirk, Kenneth L.; Daly, John W.
Lab. Chem., Natl. Inst. Diabetes Dig. Kidney Dis., CORPORATE SOURCE:

Bethesda, MD, 20892, USA

SOURCE: Biochemical Pharmacology (1987), 36(10), 1697-707

CODEN: BCPCA6; ISSN: 0006-2952

DOCUMENT TYPE: Journal LANGUAGE: English

Derivs. of adenosine receptor agonists (N6-phenyladenosines) and AR antagonists (1,3-dialkyl-8-phenylxanthines) bearing functionalized chains suitable for attachment to other mols. were described. The functionalized congener approach was extended to the synthesis of spectroscopic and other probes for adenosine receptors that retain high affinity (K2 .apprx.10-9-10-8 M) in Al-receptor binding. The probes were synthesized from an antagonist xanthine amine congener (XAC), and an adenosine amine congener (ADAC). [3H]ADAC was synthesized and found to bind highly specifically to Al-adenosine receptors of rat and calf cerebral cortical membranes with KD values of 1.4 and 0.34 nM resp. The higher affinity in the bovine brain, seen also with many of the probes derived from ADAC and XAC, is associated with Ph substituents. The spectroscopic probes contain a reporter group attached at a distal site of the functionalized chain. These bifunctional ligands may contain a spin label (e.g., the nitroxyl radical 2,2,6,6-tetramethyl-1-piperidinyloxy radical) for ESR, or a fluorescent dye, including fluorescein and 4-nitro-2,1,3-benzoxadiazole, or labels for 19F-NMR spectroscopy.

4-nitro-2,1,3-benzoxadiazole, or labels for 19F-NMR spectroscopy. Potential applications of the spectroscopic probes in characterization of adenosine receptors are discussed.

IT 110990-00-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and binding to Al-adenosine receptors)

RN 110990-00-6 CAPLUS

CN Acetamide, N-(2-aminoethyl)-2-[4-[2,3,6,7-tetrahydro-2,6-dioxo-1,3-di(propyl-2,2,3,3,3-t5)-1H-purin-8-yl]phenoxy]- (9CI) (CA INDEX NAME)

IT 110990-05-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and deprotection of)

RN 110990-05-1 CAPLUS

CN Glycinamide, N-[(phenylmethoxy)carbonyl]glycylglycyl-N-[2-[[[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]- (9CI) (CA INDEX NAME)

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IT 110990-06-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction with fluorescein isothiocyanate or biotin derivative)

RN 110990-06-2 CAPLUS

CN Glycinamide, glycylglycyl-N-[2-[[[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]-, monohydrobromide (9CI) (CA INDEX NAME)

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HBr

PAGE 1-B

$$\begin{array}{c|c} \mathtt{O} & \mathtt{O} \\ \parallel & \parallel \\ -\mathtt{C}-\mathtt{CH}_2-\mathtt{NH}-\mathtt{C}-\mathtt{CH}_2-\mathtt{NH}_2 \end{array}$$

IT 104344-36-7P 110990-01-7P 110990-02-8P 110990-04-0P 111023-89-3P 111023-91-7P

111056-21-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as mol. probe for extracellular adenosine receptors)

RN 104344-36-7 CAPLUS

CN 3,6,9,12,15-Pentaazaheptadecanoic acid,

3,6,9-tris(carboxymethyl)-11,16-dioxo-17-[4-(2,3,6,7-tetrahydro-2,6-dioxo-

1,3-dipropyl-1H-purin-8-yl)phenoxy]- (9CI) (CA INDEX NAME)

RN 110990-01-7 CAPLUS

CN 1-Piperidinyloxy, 2,2,6,6-tetramethyl-4-[[2-[[[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)

RN 110990-02-8 CAPLUS

CN Butanamide, 2,2,3,3,4,4,4-heptafluoro-N-[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]- (CA INDEX NAME)

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— CF3

RN 110990-04-0 CAPLUS

CN Glycinamide, N-[6-[[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-1-oxohexyl]glycylglycyl-N-[2-[[[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]-, [3aS-(3a α ,4 β ,6a α)]- (9CI) (CA INDEX NAME)

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RN 111023-89-3 CAPLUS

CN Acetamide, N-[2-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]thioxomethyl]amino]ethyl]-2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)

RN 111023-91-7 CAPLUS

CN Acetamide, 2,2,2-trifluoro-N-[2-[[2-[4-(2,3,6,9-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]- (CA INDEX NAME)

RN 111056-21-4 CAPLUS

CN Glycinamide, N-[[(3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]thioxomethyl]glycylglycyl-N-[2-[[[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]acetyl]amino]ethyl]- (9CI) (CA INDEX NAME)

IT 96865-92-8DP, derivs.

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as mol. probes for extracellular adenosine receptor)

RN 96865-92-8 CAPLUS

CN Acetamide, N-(2-aminoethyl)-2-[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]- (CA INDEX NAME)

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